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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/528,731
Filing Date: March 22, 2005
Appellant(s): APPEL ET AL.

John P. Musone
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/03/2007 appealing from the Office action mailed 1/12/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

MANN et al. "System And Method For Robbery Prevention" WO 99/06974 (Feb 11, 1999), pp. 3-6

6,091,334	GALIANA et al.	7-2000
5,745,034	ANDERSEN et al.	4-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 12, 13, 16-19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over MANN et al. (WO 99/06974).

Regarding Claim 12, MANN discloses *System And Method For Robbery Prevention* that teaches a an access control system (100) comprising a biometric sensor (104) for capturing biometric data reflecting stable physical characteristic of a person (See page 3 lines 19-24, page 4 lines 1-3) and an affective sensor (106) the measures vital signs of a person, such as an optical response (See page 3 lines 23-24, page 4 lines 1-2). The biometric sensor (104) captures real time data corresponding to a stable physical characteristic of a person (see page 6 lines 1-4). The affective sensor (106) is capable of detecting any of a variety of physiological characteristics of the person that will inherently change when the person is subjected to sudden fear and stress (See page 4 lines 7-10). The system of MANN does not specifically state to

diagnose the operation condition of a component of a technical installation. Rather, MANN discloses a system where by detecting physiological reactions of a person and preventing a person under coercion from accessing a secured location or facility, such a *vault*, *cash drawer*. MANN also discloses an Access control circuit that allows access to the secured area, *object*, or transaction, based on a determination of whether the individual present at the station and their vital signs conform to expected values. One of ordinary skill in the art would readily recognize that a vault, cash drawer or a similar objects are part of an installation such a bank or any similar establishments. In addition, one of ordinary skill in the art would also recognize that if the system recognizes that a person is under coercion from accessing a secured location or facility, an object, vault or drawer potentially being compromised. This is suggested by the Access control circuit (112), which allows access to the secured area, object, or transaction.

Regarding Claim 13, MANN discloses all of the claimed limitations. MANN discloses a system where the biometric sensor (104) and the affective sensor (106) measure the vital signs of a person, such pulse rate, blood pressure, blood volume pulse, respiration rate or optical response. The affective may also incorporate a galvanic skin response sensor, or an electromyogram sensor (see page 3 lines 19-24 and page 4 lines 1-3).

Regarding Claim 16, MANN discloses all of the claimed limitations. MANN discloses a system comprising an electronic storage site (102) where data corresponding to the biometric sensor (104) and affective sensor (106) is stored (see page 3 lines 8-18 and page 4 lines 4-7).

Regarding Claim 17, MANN discloses a system comprising a encoder (108) connected to a biometric sensor (104), effective sensor (106) and a comparator (110). Comparator (110) determines a degree of correspondence between the captured real time body response detected by the effective sensor (106) and the stored physiological responses in electronic storage (102) (see page 4 lines 12-25). If the physiological measurement fails to achieve predetermined degree of correspondence with stored data for that person, access is denied. If physiological response measurement does meet a predetermined degree of correspondence with stored data for that person, access to a controlled, space or area is granted (see page 6 lines 1-24).

Regarding Claim 18, the claim is interpreted and rejected as claim 1 stated above.

Regarding Claim 19, the claim is interpreted and rejected as claim 13 stated above.

Regarding Claim 21, the claim is interpreted and rejected as claim 16 stated above.

Regarding Claim 22, the claim is interpreted and rejected as claim 17 stated above.

3. Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over MANN et al. in view of Galiana et al. (US 6,091,334).

Regarding Claim 14, MANN discloses a Robbery deterrent system (100) comprising a biometric sensor (104) and an affective sensor (106) to determine body

vital measurements, such optical response (see page 3 lines 19-24 and page 4 lines 1-2). MANN does not specifically disclose changes in human's direction of sight. However, Galianna discloses *Drowsiness/Alertness Monitor* that teaches a system for monitoring motion of one or both eyes of a subject, deriving at least one physiological indicator, where the physiological indicator is selected from the group of gaze stability, saccade speed, saccade frequency, blink duration (see Col. 1 lns 25-42 and Col. 2 lns 16-48). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Galianna into the system of MANN as an alternative or supplement to indicate a physiological reaction/reaction/condition based on motion of the eye or eyes.

Regarding Claim 20, the claim is interpreted and rejected as claim 14 stated above.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over MANN et al. in view of Andersen et al. (US 5,745,034).

Regarding Claim 15, MANN discloses a system to measure the physiological reaction of an individual, but does not disclose a system where the human is equipped with a sensor device to acquire the human's physiological reaction. Andersen discloses *Providing An Alarm In Response To A Determination That A Person May Have Suddenly Experienced Fear* that teaches a physiological-condition monitoring system (10) that includes probes for attachment to a person for use in measuring such conditions, such as pulse rate, skin conductivity and respiration (See Col. 4 lns 13-37).

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Andersen into the system of MANN to provide a physiological condition monitoring system (10) as an alternative to the to measure the physiological reaction and also provides the advantage of concealment.

(10) Response to Argument

With Regards to claims 12 and 18, appellant argues that the reference of MANN does not at all relate to diagnosing the operation condition of a component of the technical installation and that the rejection appears to completely disregard the difference in meaning between the word deter and the word diagnose and that the examiner's argument is not clear or persuasive.

With Regards to claims 13 and 19, appellant argues the combination of physiological reaction is absent from the MANN reference.

With Regards to claims 14 and 20, appellant argues that the reference of MANN fails to disclose requisite subject matter relating to a diagnosis.

With Regards to claim 15, appellant argues that the combination of MANN and Anderson fails to disclose requisite subject matter relating to a diagnosis.

With Regards to claim 16, appellant argues that since MANN fails to disclose requisite subject matter relating to a diagnosis, the MANN reference is insufficient to reject claims 16 under Section 103.

With Regards to claims 17 and 22, appellant argues that the system of MANN does not disclose, teach or suggest a system providing "an assignment of the acquired

human physiological reaction at a failure, a process disturbance, and normal operation of the component in the technical installation."

Regarding Claim 21, appellant argues that the system of MANN does not suggest "a database for storing the human physiological reaction with the database representing a history of the human's physiological reaction."

5. **RESPONSE**

In response to arguments regarding Claims 12 and 18, the system of MANN relates to the diagnosis of the operation condition of a component of the technical installation when reasonably and broadly interpreted in which the examiner has done. For instance, the reference of MANN discloses a system comprising a biometric characteristic sensor (104) that measures the stably physical characteristic of a person seeking access to a controlled area. At the same time, an affective sensor (106) measures a physiological response of the individual, which varies, with the individual's level of shock, fear or apprehension, thus preventing a person under coercion from accessing a secured location or faculty, such as a vault, cash drawer, or financial transaction station. In response to output from the sensors measuring the physiological characteristics of the person, the operation condition of a faculty is affected. One of ordinary skill in the art would readily recognize that since the access control circuit (112) of the system (100) would prevent access to the secured area based on the reaction of

the sensed individual. If the sensor measures the individual under duress (see page 5 lns 3-25), broadly interpreted, the control output (114) determines the condition of the secured area, object, faculty or transaction. Thus in the examiner view, it meets the claim limitation.

In response to arguments regarding Claims 13 and 19, MANN clearly shows physiological responses based on the biometric sensor (104), such as pulse rate, blood pressure, blood volume pulse, respiration rate or optical response (see page 3 lns 19-25 and page 4 lns 1-11).

In response to arguments regarding Claims 14 and 20, examiner admitted in the previous office action, MANN did not disclose camera device to record human sight and thus was not used in the rejection. Claim 14 was rejected as being unpatentable over MANN in view of Galiana, which teaches a physiological response when monitoring one or both eyes of a subject. It would have been obvious to one of ordinary skill in the art as an alternative to the biometric sensor (104) disclosed by MANN to determine the physiological reaction of an individual using a camera.

In response to arguments regarding Claims 15 and 16, see the rejection to claims 12, 15, 16 and 18 stated above. In addition see the arguments regarding claim 12 stated above.

In response to arguments regarding Claims 17 and 22, as reasonably and broadly interpreted by the examiner, MANN does meet appellant claimed limitations. As stated above to rejection of claim 17, MANN discloses a system comprising a comparator (108) coupled to the sensor. The comparator determines a degree of

correspondence between the captured real time body response detected by the effective sensor and the stored physiological responses in electronic storage. If physiological measurement fails to achieve predetermined degree of correspondence with stored data for that person, access is denied. If it does meet it, access is granted.

In response to arguments regarding Claim 21, MANN discloses an electronic storage site (102) where data corresponding to the biometric sensor (104) and affective sensor (106) is stored (see rejection to claim 16 stated above). This suggests and is interpreted as a database for storing data corresponding to the individual who has been sensed by the sensors.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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